nosed, but if ignorant of the order of events one would be likely to err in respect of its origin and extent, and hence in respect of its operability.

It seems justified to assume that the first stage coincides with the development of the growth within the fourth ventricle, and the second with its invasion of the vermis of the cerebellum. In the case of L. Z. his friends in their despair urged an operation, but his death immediately after entering the hospital frustrated it. In the case of R. W. the diagnosis was precisely stated as "a tumor in the fourth ventricle and middle lobe of the cerebellum," and a decompressive operation mentioned as a means of palliation; but this was rejected.

We are under obligations to Dr. D'Arcy Power, of the San Francisco Polyclinic, for his kindness in photographing the sections.

COMMENTS ON TROPICAL MEDICINE.

By CREIGHTON WELLMAN, Oakland.

Professor Koch and the Elucidation of Tropical Disease.

The last years of Professor Robert Koch's life were almost entirely given up to the study of tropical disease. His work in South Africa on diseases of animals and his numerous expeditions to East Africa to investigate malaria, sleeping sickness, tick fever, plague and other tropical scourges were attended by great hardship and unremitting toil. The writer had the privilege of conferring with Professor Koch regarding some of the problems presented by disease in Africa and was deeply impressed by his great ideas and untiring devotion to this cause. Tropical medicine no less than bacteriology claimed the interest and genius of Robert Koch.

Human Plague Again.

The occurrence of another case of human plague in California emphasizes the continued danger which inheres in persistent rodent plague among us. It is to be hoped that the federal government will not relax its admirable work in our midst, and that the State and profession of California will continue every effort to protect our citizens from a possible epidemic of this disease.

Tropical Medicine at Vallejo.

The last meeting of the Northern California Medical Society, held at Vallejo, was the occasion of an enthusiastic symposium on tropical medicine. Dr. C. J. Geiger, of the Navy, read a paper on Gangosa, a new and formidable tropical disease which has appeared among us. Dr. H. R. Oliver, of San Francisco, presented a paper on hookworm in California, and Dr. Herbert Gunn, of San Francisco, and the writer each gave general addresses on some of the tropical diseases of this State. The discussion of these papers and addresses, which was opened

by Dr. Simons, of the Navy, was of great interest and well showed the interest and intelligent attitude of California physicians toward these important questions. To the writer nothing is more gratifying than the point of view expressed by the best medical men of this State when talking and writing on tropical disease and its significance in our midst.

Beri-Beri in the United States.

Several recent articles on this subject show that the disease named is much more widely spread throughout temperate America than is commonly supposed. The yearly deaths from beri-beri in California indicate that there are always several hundred cases in the State. The large part of these are probably Japanese. Recently Fraser (New York Medical Journal, April 30, 1910) has published some interesting work on the aetiology of the disease done by him in the Philippines. According to him the cause seems to be connected with the eating of improperly prepared rice, which opinion is a confirmation of the most popular of the older etilogical theories. It is very desirable that physicians in this State report all cases occurring in their practice.

The American Society of Tropical Medicine.

This society held a most important meeting at the Medical Department of the University of St. Louis, on May 11. Colonel Wm. C. Gorgas presided and the papers read were of exceptional value. The American Society of Tropical Medicine, which was organized by a few far-seeing men at a time when tropical medicine was regarded by many as an academical hobby, has grown to be one of the most useful scientific societies in the United States, and as it enters its era of great prosperity and growth we repeat our good wishes which we expressed at its inception, and add that our hopes for it have been fulfilled, but that our expectations regarding its future influence have widened and we wish the society all success in meeting them.

The Concealment of Lepers.

The writer was called to Pleasanton, California, a few weeks ago and while there confirmed the diagnosis of leprosy made by the family physician and the local health officer in the case of two boys who are now in the Alameda County Infirmary. One of these boys was in the early stages of the disease and had not been considered ill, and in fact attended public school until a short time ago. The other boy was a case of years' standing and had been concealed for a long time by his parents, who had evidently recognized the nature of the malady.

Another Menace to California.

The writer announced at the Sacramento meeting the existence of hookworm infection in mines in this State, a fact discovered by Dr. Sprague of Jackson and first brought to the writer's attention by Dr. Herbert Gunn of San Francisco. An interview with Dr. Sprague at Sacramento left no doubt in our minds regarding the matter. When we think of the 14,000 cases of this disease among the Westphalian miners a few years ago and the terrible loss of life and time among the Alpine underground workers, some of the possibilities that may confront us are rendered vivid. Another interesting fact in connection with hookworm in California is a case of the infection originating in the State and reported to the writer by Dr. Lucas of Santa Maria, California. The patient is a rancher who has never been out of three counties in this State. The case settles the question as to whether hookworm is endemic or not in California. It is.

The Technique of Examining Stools for Hookworm Eggs.

The writer has had dozens of inquiries recently concerning his method of hookworm diagnosis. principle involved was first employed independently by the writer and by Dr. Bass of New Orleans, Dr. Bass being the first to publish his results. Our own method is to use two solutions of sodium acetate of specific gravities of 1050 and 1250 respectively. A portion of suspected fæces is mixed with one of these solutions and centrifuged for about ten seconds. the liquid decanted, then the other solution is poured on and mixed gently, the whole again centrifuged, and this process repeated until the eggs are all in one layer, the sand and other heavy ingredients of the fæces remaining below and the light flocculent components lying above the zone in which the eggs re-With this technique one slide contains as many ova as fifty or a hundred slides by the ordinary method. Dr. Bass uses calcium chloride for his solutions, but the writer has not been able to employ this salt satisfactorily on account of its hygroscopic properties.

LANE MEDICAL LECTURES FOR 1910.

The Directors of Cooper Medical College have the honor to announce that the Lane Medical Lectures for 1910 will be given by Reginald Heber Fitz, M. D., LL. D., Hersey Professor of the Theory and Practice of Medicine, Harvard University. The course will consist of six lectures, entitled, "A Consideration of Some Features of the Lymphatic System," including the discovery of the Lymphatics and the recognition of their importance, Status Lymphaticus and Thymus Hyperplasia, Lymphangiectasis and Lymphangioma, Pseudoleucæmia, Hodgkins' Disease and Lymphosarcoma.

The lectures will be given in Lane Hall, corner Sacramento and Webster streets, San Francisco, at 8:30 p. m. on September 12th, 13th, 15th, 16th, 19th and 20th. These lectures are intended for the medical profession, and all members thereof are respectfully invited to attend.

CASE REPORTS.

By H. C. MOFFITT, M. D.

September 21, 1908, a woman of 28 was brought to the University Hospital. She is a widow with two children, and had been working for twelve hours a day making shirts. For eight or nine years she had noticed discharge from the right ear, but it never bothered her. About September 1st the patient had severe pain in the right ear, and put hot oil in it by advice of a neighbor. An "abscess" broke next day, and the patient had a sudden chill followed by fever. The pain disappeared. ing and diarrhea lasted two days. The patient grew weak, sweated profusely, and had five or six chills. September 16th she grew short of breath, and had pain in the left side of the chest. On entrance she looked septic; there were no pupillary changes or nystagmus. There were numerous petechiae over the trunk, arms and abdomen. There was a patch of bronchopneumonia in the right lower lobe. spleen was large, the heart dilated. The right mastoid region was swollen and tender, and there was swelling and tenderness along the upper portion of the right sterno-mastoid muscle. A diagnosis of acute mastoiditis, sinus thrombosis, and general sepsis was made in the medical ward, and operation advised. The fundus was at this time normal. A blood count showed 22,400 leukocytes with 85 per cent polynuclears. On September 23rd Dr. McKee The following description is from his operated. notes:

"Usual incision for radical operation. Upon opening cortex, pus under pressure exuded. No large cells. Posterior osseous wall of meatus removed down to facial ridge. Carious ossicles removed, middle ear and mastoid cavity thrown into one. Removing discolored bone opened a large abscess on the sinus filled with foul pus under great pressure. Sinus laid bare for nearly 2 cm. The wall yellowish, and sinus collapsed, but seemed to fill after removing pressure. Sinus incised, and copious bleeding from both directions with probe; no clot discovered."

The next day leukocytes dropped to 8,400 with 77 per cent polynuclears. Decided twitching of the right facial muscles was noted; this persisted subsequently. The patient did well for two days, but then began to be restless and dull. Leukocytes rose to 21,000 with 92 per cent polynuclears. culture during this period was negative. The patellar reflexes were decreased. Both retinae were edematous, the right retina decidedly more than the left. September 28th there was complaint of slight soreness in the back of the neck, but next day this had disappeared, and patient said she felt well. The wound was clean. A small amount of fluid was withdrawn from the right pleura, and found to contain both squamous and small mononuclear cells. The condition became worse from the 29th to October 3rd, and it became apparent that the patient had both meningitis and a cerebral abscess, which was located in the right temporal lobe. Leukocytes varied from 10,800 to 21,600. There was occasional nausea. The patient was unable to concentrate her attention on questions asked her, and she was irritable and restless. The right pupil was slightly larger than the left. There was a distinct neuro-retinitis more marked in the right eye. The abdominal reflexes were absent, knee jerks much increased. There was marked spasticity of the lower extremities, and a decided Kernig. On the evening of October 2nd, there was a general convulsion with unconsciousness. The head and eyes were turned